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0408

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RAW SEQUENCE LISTING

DATE: 04/11/2002

PATENT APPLICATION: US/09/991,262

TIME: 09:18:07

Input Set : N:\Crf3\RULE60\09991262.raw

Output Set: N:\CRF3\04112002\I991262.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: Christian, P. D., Gordon, K. H.J., Hanzlik, T. N.

7 (ii) TITLE OF INVENTION: Insect Viruses and Their Uses in

8 Protecting Plants

10 (iii) NUMBER OF SEQUENCES: 57

12 (iv) CORRESPONDENCE ADDRESS:

13 (A) ADDRESSEE: Flehr Hohbach Test Albritton & Herbert LLP

14 (B) STREET: Four Embarcadero Center, Suite 3400

15 (C) CITY: San Francisco

16 (D) STATE: California

17 (E) COUNTRY: United States

18 (F) ZIP: 94111-4187

20 (v) COMPUTER READABLE FORM:

21 (A) MEDIUM TYPE: Floppy disk

22 (B) COMPUTER: IBM PC compatible

23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

24 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

26 (vi) CURRENT APPLICATION DATA:

C--> 27 (A) APPLICATION NUMBER: US/09/991,262

C--> 28 (B) FILING DATE: 20-Nov-2001

29 (C) CLASSIFICATION:

47 (vii) PRIOR APPLICATION DATA:

33 (A) APPLICATION NUMBER: US/09/234,238

34 (B) FILING DATE: 20-JAN-1999

36 (A) APPLICATION NUMBER: US 08/485,355

37 (B) FILING DATE: 07-JUN-1995

40 (A) APPLICATION NUMBER: US 08/440,522

41 (B) FILING DATE: 12-MAY-1995

44 (A) APPLICATION NUMBER: US 08/089,372

45 (B) FILING DATE: 08-JUL-1993

48 (A) APPLICATION NUMBER: AU PL4081/92

49 (B) FILING DATE: 14-AUG-1992

51 (viii) ATTORNEY/AGENT INFORMATION:

52 (A) NAME: Trecartin, Richard F.

53 (B) REGISTRATION NUMBER: 31,801

54 (C) REFERENCE/DOCKET NUMBER: A-58631-3/RFT/DSS

56 (ix) TELECOMMUNICATION INFORMATION:

57 (A) TELEPHONE: (415) 781-1989

58 (B) TELEFAX: (415) 398-3249

59 (C) TELEX: 910 277299

61 (2) INFORMATION FOR SEQ ID NO: 1:

63 (i) SEQUENCE CHARACTERISTICS:

ENTERED

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64          (A) LENGTH: 13 base pairs
65          (B) TYPE: nucleic acid
66          (C) STRANDEDNESS: unknown
67          (D) TOPOLOGY: unknown
W--> 69      (ii) MOLECULE TYPE: DNA
71          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
73 GGATCCACAG NNN                                     13
75 (2) INFORMATION FOR SEQ ID NO: 2:
77      (i) SEQUENCE CHARACTERISTICS:
78          (A) LENGTH: 28 base pairs
79          (B) TYPE: nucleic acid
80          (C) STRANDEDNESS: unknown
81          (D) TOPOLOGY: unknown
W--> 83      (ii) MOLECULE TYPE: DNA
85          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
87 ATGGGCGATG CCGGCGTCGC GTTCACAG                     28
89 (2) INFORMATION FOR SEQ ID NO: 3:
91      (i) SEQUENCE CHARACTERISTICS:
92          (A) LENGTH: 27 base pairs
93          (B) TYPE: nucleic acid
94          (C) STRANDEDNESS: unknown
95          (D) TOPOLOGY: unknown
W--> 97      (ii) MOLECULE TYPE: DNA
99          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
101 ATGGAGGATG CTGGAGTGGC GTCACAG                     27
103 (2) INFORMATION FOR SEQ ID NO: 4:
105      (i) SEQUENCE CHARACTERISTICS:
106          (A) LENGTH: 27 base pairs
107          (B) TYPE: nucleic acid
108          (C) STRANDEDNESS: unknown
109          (D) TOPOLOGY: unknown
W--> 111     (ii) MOLECULE TYPE: DNA
116          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
118 ATGAGCGAGG CCGGCGTCGC GTCACAG                     27
120 (2) INFORMATION FOR SEQ ID NO: 5:
122      (i) SEQUENCE CHARACTERISTICS:
123          (A) LENGTH: 30 base pairs
124          (B) TYPE: nucleic acid
125          (C) STRANDEDNESS: unknown
126          (D) TOPOLOGY: unknown
W--> 128     (ii) MOLECULE TYPE: DNA
130          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
132 CCATCGATGC CGGACTGGTA TCCAGGGGG                     30
134 (2) INFORMATION FOR SEQ ID NO: 6:
136      (i) SEQUENCE CHARACTERISTICS:
137          (A) LENGTH: 31 base pairs
138          (B) TYPE: nucleic acid
139          (C) STRANDEDNESS: unknown
140          (D) TOPOLOGY: unknown

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W--> 142      (ii) MOLECULE TYPE: DNA
      144      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
      146 CCATCGATGC CGGACTGGTA TCCCGAGGGA C                      31
      148 (2) INFORMATION FOR SEQ ID NO: 7:
      150      (i) SEQUENCE CHARACTERISTICS:
      151          (A) LENGTH: 39 base pairs
      152          (B) TYPE: nucleic acid
      153          (C) STRANDEDNESS: unknown
      154          (D) TOPOLOGY: unknown

W--> 156      (ii) MOLECULE TYPE: DNA
      158      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
      160 CCATCGATGA TCCAGCCTCC TCGCGGCGCC GGATGGGCA              39
      162 (2) INFORMATION FOR SEQ ID NO: 8:
      164      (i) SEQUENCE CHARACTERISTICS:
      165          (A) LENGTH: 39 base pairs
      166          (B) TYPE: nucleic acid
      167          (C) STRANDEDNESS: unknown
      168          (D) TOPOLOGY: unknown

W--> 170      (ii) MOLECULE TYPE: DNA
      172      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
      174 GCTCTAGATC CATTGCGCCAT CCGAAGATGC CCATCCGGC              39
      176 (2) INFORMATION FOR SEQ ID NO: 9:
      178      (i) SEQUENCE CHARACTERISTICS:
      179          (A) LENGTH: 39 base pairs
      180          (B) TYPE: nucleic acid
      181          (C) STRANDEDNESS: unknown
      182          (D) TOPOLOGY: unknown

W--> 184      (ii) MOLECULE TYPE: DNA
      186      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
      188 CCATCGATTT ATGCCGAGAA GGTAACCAGA GAAACACAC              39
      190 (2) INFORMATION FOR SEQ ID NO: 10:
      192      (i) SEQUENCE CHARACTERISTICS:
      193          (A) LENGTH: 39 base pairs
      194          (B) TYPE: nucleic acid
      195          (C) STRANDEDNESS: unknown
      196          (D) TOPOLOGY: unknown

W--> 198      (ii) MOLECULE TYPE: DNA
      200      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
      202 GCTCTAGACC AGGTAATATA CCACAACGTG TGTTTCTCT              39
      204 (2) INFORMATION FOR SEQ ID NO: 11:
      206      (i) SEQUENCE CHARACTERISTICS:
      207          (A) LENGTH: 45 base pairs
      208          (B) TYPE: nucleic acid
      209          (C) STRANDEDNESS: unknown
      210          (D) TOPOLOGY: unknown

W--> 212      (ii) MOLECULE TYPE: DNA
      216      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
      218 GGGGGGAATT CATTAGGTG AACTATAGT TCTGCCTCCC CGGAC          45
      220 (2) INFORMATION FOR SEQ ID NO: 12:

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222      (i) SEQUENCE CHARACTERISTICS:
223          (A) LENGTH: 27 base pairs
224          (B) TYPE: nucleic acid
225          (C) STRANDEDNESS: unknown
226          (D) TOPOLOGY: unknown
W--> 228      (ii) MOLECULE TYPE: DNA
230          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
232 GGGGGGATCC TGGTATCCCA GGGGGGC                               27
234 (2) INFORMATION FOR SEQ ID NO: 13:
236      (i) SEQUENCE CHARACTERISTICS:
237          (A) LENGTH: 28 base pairs
238          (B) TYPE: nucleic acid
239          (C) STRANDEDNESS: unknown
240          (D) TOPOLOGY: unknown
W--> 242      (ii) MOLECULE TYPE: DNA
244          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
246 CCGGAAGCTT GTTTTCTTT CTTTACCA                               28
248 (2) INFORMATION FOR SEQ ID NO: 14:
250      (i) SEQUENCE CHARACTERISTICS:
251          (A) LENGTH: 46 base pairs
252          (B) TYPE: nucleic acid
253          (C) STRANDEDNESS: unknown
254          (D) TOPOLOGY: unknown
W--> 256      (ii) MOLECULE TYPE: DNA
258          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
260 GGGGGATCCG ATGGTATCCC GAGGGACGCT CAGCAGGTGG CATAGG        46
262 (2) INFORMATION FOR SEQ ID NO: 15:
264      (i) SEQUENCE CHARACTERISTICS:
265          (A) LENGTH: 52 base pairs
266          (B) TYPE: nucleic acid
267          (C) STRANDEDNESS: unknown
268          (D) TOPOLOGY: unknown
W--> 270      (ii) MOLECULE TYPE: DNA
272          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
274 AAATAATTTT GTTACTTTAG AAGGAGATAT ACATATGAGC GAGCGAGCAC AC  52
276 (2) INFORMATION FOR SEQ ID NO: 16:
278      (i) SEQUENCE CHARACTERISTICS:
279          (A) LENGTH: 55 base pairs
280          (B) TYPE: nucleic acid
281          (C) STRANDEDNESS: unknown
282          (D) TOPOLOGY: unknown
W--> 284      (ii) MOLECULE TYPE: DNA
286          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
288 AAATAATTTT GTTTAACCTT AAGAAGGAGA TCTACATATG CTGGAGTGGC GTCAC  55
290 (2) INFORMATION FOR SEQ ID NO: 17:
292      (i) SEQUENCE CHARACTERISTICS:
293          (A) LENGTH: 30 base pairs
294          (B) TYPE: nucleic acid
295          (C) STRANDEDNESS: unknown

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Output Set: N:\CRF3\04112002\I991262.raw

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296          (D) TOPOLOGY: unknown
W--> 298      (ii) MOLECULE TYPE: DNA
300          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
302 GGAGATCTAC ATATGGGAGA TGCTGGAGTG                      30
304 (2) INFORMATION FOR SEQ ID NO: 18:
306      (i) SEQUENCE CHARACTERISTICS:
307          (A) LENGTH: 17 base pairs
308          (B) TYPE: nucleic acid
309          (C) STRANDEDNESS: unknown
310          (D) TOPOLOGY: unknown
W--> 312      (ii) MOLECULE TYPE: DNA
316          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
318 GTAGCGAACG TCGAGAA                      17
320 (2) INFORMATION FOR SEQ ID NO: 19:
322      (i) SEQUENCE CHARACTERISTICS:
323          (A) LENGTH: 31 base pairs
324          (B) TYPE: nucleic acid
325          (C) STRANDEDNESS: unknown
326          (D) TOPOLOGY: unknown
W--> 328      (ii) MOLECULE TYPE: DNA
330          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
332 GGGGGATCCT CAGTTGTCAG TGGCGGGGTA G                      31
334 (2) INFORMATION FOR SEQ ID NO: 20:
336      (i) SEQUENCE CHARACTERISTICS:
337          (A) LENGTH: 28 base pairs
338          (B) TYPE: nucleic acid
339          (C) STRANDEDNESS: unknown
340          (D) TOPOLOGY: unknown
W--> 342      (ii) MOLECULE TYPE: DNA
344          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
346 GGGGATCCCT AATTGGCACG AGCGGCGC                      28
348 (2) INFORMATION FOR SEQ ID NO: 21:
350      (i) SEQUENCE CHARACTERISTICS:
351          (A) LENGTH: 29 base pairs
352          (B) TYPE: nucleic acid
353          (C) STRANDEDNESS: unknown
354          (D) TOPOLOGY: unknown
W--> 356      (ii) MOLECULE TYPE: DNA
358          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
360 AATTACATAT GGCGGCCGCC GTTCTGCC                      29
362 (2) INFORMATION FOR SEQ ID NO: 22:
364      (i) SEQUENCE CHARACTERISTICS:
365          (A) LENGTH: 29 base pairs
366          (B) TYPE: nucleic acid
367          (C) STRANDEDNESS: unknown
368          (D) TOPOLOGY: unknown
W--> 370      (ii) MOLECULE TYPE: DNA
372          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
374 AATTACATAT GTTCGCGGCC GCCGTTTCT                      29

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VERIFICATION SUMMARY

DATE: 04/11/2002

PATENT APPLICATION: US/09/991,262

TIME: 09:18:08

Input Set : N:\Crif3\RULE60\09991262.raw

Output Set: N:\CRF3\04112002\I991262.raw

L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:69 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:83 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:97 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:111 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:128 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:142 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:156 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:170 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:184 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:198 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:212 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:228 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:242 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:256 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:270 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:284 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:298 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:312 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18
L:328 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:342 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20
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L:448 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27
L:463 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:498 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30
L:532 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:566 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:580 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35
L:594 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36
L:608 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37
L:623 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=38
L:637 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39
L:1423 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=41
L:1666 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43
L:1923 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=45
L:2157 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47
L:2326 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=49
L:2658 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=51
L:3000 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=53
L:3014 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=54
L:3029 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=55
L:3043 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=56
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